

RIVO MULTITRADE OPTICAL SYSTEMS

To facilitate the relocation of optical cable lines



Overview

Micro-trenching in-volves digging a small trench just inches under the road surface along the curb line to install fiber optic lines.

Key Takeaways

Relocating optical cable lines requires careful route planning, proper handling, and adherence to installation standards to ensure network integrity and minimize costs. Route Planning and Survey

Effective relocation begins with detailed route planning using GIS, CAD, and field data collection to map existing infrastructure, terrain, and obstacles . This includes identifying roads, buildings, underground utilities, and potential conflicts. Obtaining right-of-way (ROW) permits and coordinating with local authorities is essential for both aerial and underground relocations . Surveying the route ensures proper pole placement for aerial cables or trench alignment for underground installations .

Cable Handling and Respooling

When moving existing fiber, respooling and cutting procedures must follow strict guidelines to prevent damage. Fiber optic cables are sensitive to excessive pulling, bending, or crushing, and must not exceed the minimum bend radius or tensile limits . Proper inspection of reels and use of mechanical aids for heavy cables are critical to avoid kinks or transmission degradation . Personnel should wear protective equipment and follow safety protocols during handling.

Aerial vs Underground Relocation

- Aerial relocation involves mounting cables on poles or towers, often using All-Dielectric Self-Supporting (ADSS) cables. This method is faster, less costly, and avoids excavation in rocky or uneven terrain . Pole readiness, proper alignment, and UV-protected cable jackets are important for durability .
- Underground relocation uses ducts or conduits, offering protection from weather and physical damage. While more expensive and labor-intensive, it provides long-term reliability and aesthetic advantages .

Cable Localization and Damage Assessment

Before relocation, it is important to locate existing cables accurately, especially those without metallic elements. Techniques include depth detection and route tracing to prevent accidental cuts or damage . Advanced methods can also identify damage sites, ensuring that relocated cables maintain operational integrity .

Implementation Considerations

- Determine splice points and slack storage locations for efficient installation .
- Use survey rods and pegs to maintain straight alignment for aerial poles .
- Coordinate with traffic and local agencies to minimize disruption during relocation .
- Consider lightweight lashing to existing cables if permitted, reducing installation time .

Conclusion

A successful optical cable relocation combines strategic route planning, careful handling, and adherence to technical standards. Leveraging GIS-based planning, proper respooling techniques, and choosing the appropriate aerial or underground method ensures minimal downtime, cost efficiency, and long-term network reliability .

Article Content

Relocation of Electrical & Fiber Optic Lines to Underground

This project involved the comprehensive relocation of all above-ground low voltage and high voltage electrical lines, as well as fiber

Office of Transportation Policy Brief Policy Studies

Micro-trenching in-volves digging a small trench just inches under the road surface along the curb line to install fiber optic lines.

BGCS-1 Optical Cable Relocation Plan

Method Statement for BGCS-1 Fiber Optic Cable Relocation Construction - Free download as Word Doc (.doc / .docx), PDF File

Fiber Optic Infrastructure Relocation | DataTech Logistics

Expert fiber optic relocation services for MPO, LC, and SC connector systems with OTDR testing, loss-budget verification, and

Physical Network Cable Relocation

Optimize your network's performance through strategic cable relocation; discover the essential steps and tools needed for a

The FOA Reference For Fiber Optics -Outside Plant Construction ...

Outside Plant Construction Guide Introduction Review Of Fiber Optic Technology. Project Preparation And Guidelines. Underground

Seamlessly Relocate Your NBN Cable: A Comprehensive Guide

Relocating your NBN cable can potentially affect your internet speed, both positively and negatively, depending on

Cable Relocation Services for Utility Projects | CA Telecom

What is cable relocation for utilities? Cable relocation is the process of moving the existing cables for utility or telecom to

Direct-Buried Installation of Fiber Optic Cable

Cable Precautions / Specifications CAUTION: Take care to avoid cable damage during handling and installation. Fiber optic cable is

OPTICAL FIBRE CABLES INSTALLATION GUIDE

The objective of this document is to be an optical fibre cable installation and laying guide, addressed to new installers, also being

Fiber Optic Infrastructure Relocation | DataTech Logistics

Fiber optic cabling demands a level of care during relocation that goes well beyond what copper infrastructure requires. Connectors

Fiber Optic Cable Installation Process: Connecting Homes

The fiber optic cable installation process, meaning connecting homes with internet service, is becoming increasingly critical and

Relocating a fibre-optic router-modem within a home

From there, there is an optic fiber cable that connect to it and into your modem. That cable is simplex, single-mode, single connector.

The FOA Reference For Fiber Optics

The optical time domain reflectometer (OTDR) uses optical radar-like techniques to create a picture of a fiber in an installed fiber

101 Guidelines for Fiber Optic Cable Installation

Cables that are installed in the vicinity of high-voltage power lines should be grounded, including all-dielectric cables. Maintain proper

Unearthing the Underground: The Vital Role of Utility Relocation

Utility relocation extends to telecommunications, encompassing phone lines, internet cables, and cable TV connections. Here's how

Extend Fiber line so allow relocation of ONT/Router

Jeirdus 50M SC/APC to SC/APC Outdoor Armored Simplex 9/125 SM Fiber Optic Cable Jumper Optical Patch Cord Singlemode

The FOA Reference For Fiber Optics

Fiber Optic Network Design Jump To: The Communications System Cabling Design Choosing Transmission Equipment Planning

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Technical inquiry: <https://rivomultitrade.co.za/contact.html>

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